

# Understanding Community Perceptions of Livelihoods, Assets, and Recovery Strategies:

### **Preliminary Findings from Northern Kenya**

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"Assets, Cycles and Livelihoods (ACL): Addressing Food Security in the Horn of Africa and Central America" Research Project, Institute for Development Anthropology, Broadening Access and Strengthening Input Market Systems -Collaborative Research Support Program (BASIS-CRSP).

This work is supported in part by the US Agency for International Development (USAID) Grant No. LAG-A-00-96-90016-00 through the BASIS CRSP. The lead institution for the research reported here is the Institute for Development Anthropology, USA. All views, interpretations, and conclusions are those of the authors and not necessarily those of the supporting or cooperating organizations.

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#### INTRODUCTION

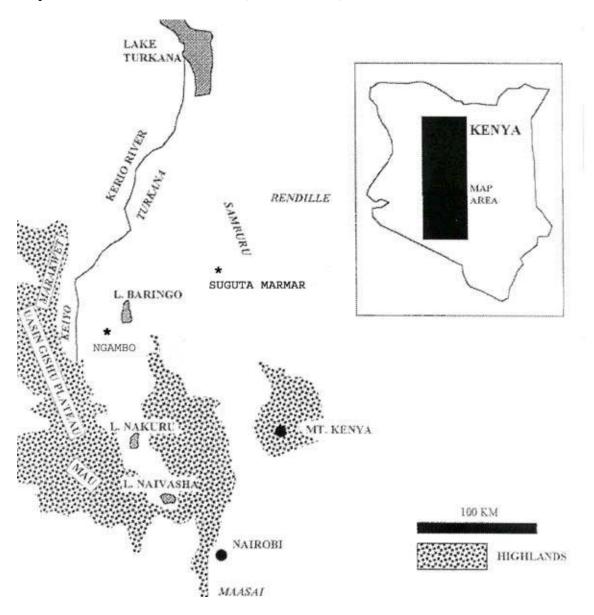
As part of the research project on "Assets, Cycles and Livelihoods (ACL): Addressing Food Security in the Horn of Africa and Central America", a series of community assessments were carried out in the project's secondary research sites in northern Kenya, Ngambo Location, Baringo District and Suguta Mar Mar Location, Samburu District (see Map 1). These sites are secondary research sites of the ACL program that were identified because of the existence of longitudinal data on droughtcoping and recovery strategies; the availability of on-going studies under the Global Livestock-CRSP Pastoral Risk Management in East Africa (PARIMA) Project and a coauthor's own long-term research in the area (see Little 1992); and the complementarity to the ACL's primary research site in drought-prone South Wollo, Ethiopia (see Little et al. 2002). To complement the household survey research of PARIMA in northern Kenya and to replicate the research methodology pursued in South Wello/Oromiya Zones, Ethiopia, community assessments that used both group and key informant interviews were carried out in February and March, 2002. The broad goal of the community assessments is to provide socioeconomic and institutional information, both qualitative and quantitative, of the Il Chamus (Baringo) and Samburu (Suguta Mar Mar) communities, in order to supplement the quantitative household data that are available. An ancillary purpose is to provide community-based understandings about local drought (shock)-coping and recovery strategies and community institutions, trends, and perspectives that cannot be easily gleaned from household surveys. The results of the community assessments in Ethiopia revealed remarkable similarities to the preliminary results of the household study, even though they invoked very different methodologies (see Amare et al. 2000).

An interview guideline for community members that included both closed and open-ended questions was used. With certain modifications, it was designed to be similar to the research instrument that was utilized in South Wello/Oromiya, Ethiopia (see Amare et al. 2000). This tactic was taken to eventually facilitate comparisons between the research sites. An important difference between the different locations, however, is the high dependence on livestock production (pastoralism) in the Kenyan locations, which required certain changes to the original interview guidelines employed in Ethiopia. Generally, in the Kenyan work questions and interviews cluster around issues of resource access, history, and community perceptions of constraints and opportunities to income and food security. Community-level assessments of poverty, the severity of recent droughts and other climatic shocks (e.g., the 1997-1998 El Nino event), and group perceptions of economic and market opportunities and constraints were highlighted.

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<sup>&</sup>lt;sup>1</sup> The authors would like to thank the PARIMA project and its Principal Investigator, D. Layne Coppock for recognizing the complementarity of this research and for his general support. In particular, John McPeak, the GL-CRSP post-doctoral researcher at the time and currently an Assistant Professor at Syracuse University, was particularly helpful in lining up field assistants and for providing excellent suggestions on the interview guideline. Other members of the PARIMA team have been especially helpful, particularly Abdillahi Aboud, Christopher Barrett, and Winnie Luseno.

Map 1. Location of Research Sites (marked with \*)



Interviewers were encouraged to go well beyond the questions in the guideline and allow respondents to take conversations in different but related directions.

The PARIMA method of data collection utilizes the Location, an administrative unit in Kenya, for its sampling approach. For the purposes of the community assessments, the Location is too large a unit to capture the diversity and nuanced variation of different settlements. Thus, within each Location we decided to carry out assessments at a smaller administrative level, the sub-location. The sub-location unit usually is a collection of four or five villages and/or settlements and is closer to what is meant by 'community.' It also resembles in scale the Peasant Association (PA) unit that was utilized in the Ethiopian assessments. For each of the two locations, interviews were conducted in all sub-locations:

Suguta Mar Mar Location (5 sub-locations):

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--Lomolog sub-location

--Suguta " "

--Logorate " "

--Amaya " "

--Lengewan " "
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Ngambo Location (3 sub-locations):

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--Sintaan sub-location
--Loropili " "
--Ngambo " "
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Two different interview guidelines were utilized in the assessments: (1) a key informant and (2) a focus group interview instrument (see Appendices 1 and 2). For each sub-location, three different sets of group interviews were conducted: a group of key informants (male and female); a group of female community members; and a group of male community members. Interviews with groups of key informants (teachers, traders, local officials, etc.) comprised a mixed gender group of 4 to 9 individuals. Most groups of key informants, however, had five members. Focus group interviews ranged in size from 5 to 9 members. Groups of males and females were interviewed separately, since it was felt that women might be reluctant to speak in front of males and because perceptions and responses were likely to reveal a gender dimension. Group discussions usually took about 2 hours and the research team typically arranged interviews at least 1-2 days in advance. Sample selection was opportunistic rather than random.

#### PRELIMINARY FINDINGS

The findings in this section should be treated as preliminary, more closely resembling 'field notes' and observations rather than rigorous discussion and analyses. An important reason for the report is to provide some descriptive, community-based observations to supplement data from household and individual interviews. The responses from the focus groups and key informants are kept separate whenever possible.

The history and livelihood strategies of the different communities in this study vary in several important ways. The Ngambo community of Il Chamus agropastoralists have practiced irrigated farming since the nineteenth century (Little 1992). They include a large number of Samburu families and clans who joined the community during the nineteenth century. The usual motivation for outsiders to settle among the Il Chamus was to seek refuge from drought and/or warfare. The Il Chamus herds currently are smaller than the Samburu of Suguta Mar Mar, as well as more oriented toward small stock. Il Chamus are also considerably more sedentary than the Samburu who, while less nomadic than in the past, still utilize a system of mobile satellite camps to herd their livestock. For the most part, the Samburu began to engage in rainfed agriculture only in the 1970s, and only minimally until the late 1980s.

Both ethnic groups are part of the larger Maa-speaking complex, which includes the better-known and demographically larger Maasai of southern Kenya and northern Tanzania (see Little 1998). Since the onset of the 1979-1980 drought, the residents of both Ngambo (NG) and Suguta Mar Mar (SMM) increasingly have sought supplemental activities to support their livestock holdings. Both areas include large numbers of impoverished former pastoral households, who now seek meager incomes from beer brewing, handicrafts, petty trade, and charcoal sales.

#### **Land and Environment**

Land-related issues in both communities show similarities but also important differences. The five most frequently mentioned land constraints in both communities are listed in Tables 1 and 2. Table 1 disaggregates responses by gender, while Table 2 treats differences according to location. The figures in all the tables below refer to the number of respondent groups, out of a total of 8 groups per category (male, female, key informant), who mentioned the problem. For example, Table 1 shows that seven of the male and six of the female groups indicated a decline in pasture quality as a major problem in their community.

Table 1: Ranked Perceptions of Land Constraints by Gender (number of responses)

Type of Respondent	Decline in Pasture Quality	Bush Encroachment		Environmental Degradation	Lack of Good Pasture
Male	7	4	3	4	2
Female	6	3	3	1	1
All	13	7	6	5	3

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Table 2: Ranked Perceptions of Land Constraints by Location (number of responses)

Type of	Decline in	Bush	Access to	Environmental	Lack of
Respondent	Pasture	Encroachment	Good	Degradation	Good
	Quality		Farmland		Pasture
S. Mar Mar	9	1	3	3	0
Ngambo	4	6	3	2	3
All	13	7	6	5	3

In both tables, the decline in pasture quality is the biggest concern, especially in SMM where dependence on livestock is higher than in NG. Here population increase, as well as accelerated immigration from the insecure north (i.e.,Baragoi, Samburu District) have created additional pressure on the range. Baragoi is near the border with Turkana District and insecurity and conflict have been high there since the 1990s, and much earlier in certain locations. To this day, the prime grazing lands of the Lbarta plains, just south of the town of Baragoi, have been virtually unoccupied since Turkana conducted massive raids in the areas in 1996.

Bush encroachment is of greater concern in NG and reflects a location-specific constraint. With the exception of one group of male elders in SMM, few Samburu identified bush encroachment as a major problem. By contrast, it is identified as a common problem in NG and the concern seems to be related to the proliferation of the Prosopis spp. tree (in North America, mesquite tree). This tree species crowds out grasses and increases morbidity and feeding problems among goats and sheep. Although resembling a variety of acacia, the seed pods of the Prosopis tree are bad for the teeth and intestines of shoats. The Il Chamus community is especially upset about this environmental problem, especially women since they are more involved with herding shoats and thus more aware of the grazing constraints caused by the Prosopis.

An informative example of poorly-conceived development assistance, Prosopis trees were planted in the area by a development agency during the mid 1980s. It was carried out as part of a reforestation project, often using local labor on a food-for-work basis. For the reasons stated earlier, it has been an unmitigated disaster for the NG community and consequently they are now largely resistant to forestry interventions. While there are restrictions on cutting live acacia trees for firewood and house construction, the cutting of the Prosopis tree is encouraged by local elders who, like women, wish nothing more than to rid themselves of this nuisance.

Soil erosion and environmental degradation generally seem to be of greater concern to men than to women. A possible reason for this is that these problems heavily impact cattle production, an activity whose income largely accrues to men. Gully erosion and the loss of good grass species are highlighted as evidence of environmental degradation in both locations. Access to good-quality farmland is of equal concern to men and women, reflecting the importance of farming to both gender groups. In both

locations it is an important means of achieving household food security and reducing the need to sell livestock to buy grain; the latter strategy contributes to herd recovery after droughts.

Water-related problems show important differences between males and females and between the different communities, as highlighted in Tables 3 and 4. As the data show, distance to water and the problem of water sources that dry up are the largest concerns, and they are mostly correlated with location, as is lack of drinking water. Distance to water is the number one water-related issue identified. Lack of water for livestock, lack of water for irrigation, and conflicts over water seem to be most closely correlated with gender, all of which show men having greater concern than women. This pattern makes sense because lack of water for livestock and conflicts over water use greatly affect the domains of livestock production and manage ment, both of which males assume key role.

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Table 3: Water Issues by Gender Group (number of responses)

Type of	Water too	Water	Lack of	Lack of	Lack of	Conflicts
Respondent	Distant	Sources	Water for	Water for	Drinking	over
		Drying Up	Livestock	Irrigation	Water	Water use
Male	7	6	5	3	2	3
Female	8	6	3	1	2	1
All	15	12	8	4	4	4

Table 4: Water Issues by Location (number of responses)

Type of	Water too	Water	Lack of	Lack of	Lack of	Conflicts
Respondent	Distant	Sources	Water for	Water for	Drinking	over
		Drying Up	Livestock	Irrigation	Water	Water use
Suguta	10	8	3	2	3	2
Ngambo	5	4	5	2	1	2
All	15	12	8	4	4	4

Many SMM *manyattas* (homesteads) are far from water sources during the height of the dry season, the period when the interviews were conducted. By contrast, NG residents are close to water taps or to the Pekerra Irrigation Scheme, where permanent water is found. Although both men and women mention several water problems, women more often than men point to source distance as their top or second most important water problem because fetching water is the work of women (and girls).

While the drying up of water sources is of equal concern to men as it is to women, it is more of an issue to SMM than to NG informants. This pattern also is not surprising since natural sources (especially springs) and, in a few cases, constructed dams, is SMM's main reliable water supplies and are susceptible to drying. The one exception is SMM's Amaya sub-location, which is located along a permanent river. Because of the presence of additional perennial water sources, NG is considerably better off. NG is near the irrigation scheme and there are several taps and some dams and boreholes. Lack of drinking water, while of equal concern to males and females, is of greater concern in SMM, which most likely relates to their overall problem of water being too distant and water sources drying up.

Lack of water for livestock is mentioned more often by men than women, as well as ranked as a greater concern, which obviously reflects males' herd watering duties. It is also a problem mentioned more often in NG, and ranked more highly as well, perhaps because NG residents have to take their animals further to water them. Much of the water in NG comes from the Pekerra Irrigation Scheme, the residents of which favor watering crops over livestock and are weary of livestock damage to crops, thus usually forcing people to water their animals at Lake Baringo, a distance of about 6 kilometers.

Lack of water for irrigation is mentioned equally in SMM and NG, although SMM has very little irrigation. In SMM small areas of irrigated agriculture are found only in Amaya sub-location of SMM, but there remains great interest in the potential for irrigation. With regard to gender, men mention the deficiency in irrigation more often than women, which is a bit unusual since it is women who typically focus on irrigated crops, such as tomatoes and *sukuma wiki* (kale). Perhaps men are thinking more about large-scale irrigation, or the benefits of irrigated agriculture for increased incomes and food security in general. Women of NG remarked on more than one occasion that they are responsible for growing food crops for home consumption, while men generally are interested in raising crops on a large-scale—for example, maize so they can sell in order to purchase livestock.

Based on interviews with key informants, Table 5 summarizes local perceptions about the value of different communal resources. The resources are ranked from left to right in general order of importance. The table reflects the frequency of mention of the resource, not it's ranking by the community, which we explain below.

Table 5: Ranking and Importance of Different Communal Resources (Percentage of Mention)

Location	Pastures	Water	Rivers/Lakes	Forests	Wild	Swamps	Wildlife
		Points			Foods		
Suguta	100%	80%	67%	100%	80%	40%	60%
Ngambo	100%	67%	40%	100%	67%	67%	0%
All	100%	75%	50%	100%	75%	50%	38%

All groups of respondents mention pastures as a critical communal resource, although it is ranked second by all except one group in NG, who ranked it first. It is not surprising that pastures are an important communal resource, because of the emphasis on animal production, especially during prolonged dry periods when farming is not viable and livestock provide both sustenance and a principal source of cash.

Water points are ranked the highest by four out of five SMM informants, while they are listed as third or fourth in importance by two of the NG key informant groups. This difference suggests that water points are a more important communal resource than pastures in SMM, and in fact all water sources are communal except for the occasional hand dug well. In NG, by contrast, many water sources (e.g., water taps) are privately owned.

Rivers/lakes are ranked as the most critical communal resources by respondents in two NG sub-locations, but not mentioned in Loropili, the sub-location furthest from the Pekerra River and Lake Baringo. Water points are ranked highest in Amaya, which has a seasonal river, and they are also mentioned in neighboring Longewan. Thus, the importance of rivers/lakes as a communal resource seems to be related to the sub-location's proximity to the resource.

Forests are mentioned by everybody as a communal resource, but ranked third by respondents in SMM (i.e., after pastures and water points) and one group in NG. The other two sub-locations in NG rank it as second or fourth. Forests are therefore an important resource, but not as important as water points or pastures, both of which are ranked above forests by all but one group in NG.

Although the frequency of mention of wild foods appears the same as for water points, there is an important caveat. Wild foods are ranked fourth or fifth in importance by everybody except one group in NG, which ranks it third. Among groups who mention water points, pastures, and rivers/lakes, wild foods are ranked lower, ranking only as high as third on one occasion. The same pattern holds vis-à-vis forest resources, which are ranked as a higher priority than wild foods by all but one group. And elsewhere in the surveys, it is clear that wild foods currently do not seem to be an important resource even during droughts, especially as people are increasingly used to and prefer grains, whether purchased or acquired through food aid. Some informants also mention the fact that wild foods are scarcer today because of increasing population pressure and declines in forests and other natural vegetation.

Swamps are a more important resource in NG than SMM, which is not surprising since the former location is close it is to major wetlands in Lake Baringo-Bogoria basin. Because Loropili is not as close to these swamps as other sub-locations, informants from Loropili do not mention swamps as an important communal resource. In SMM, only those in SMM Town and Logorate sub-locations mention swamps as an important communal resource, which is understandable since these are the sub-locations closest to

the SMM swamp. The name Suguta Mar Mar (SMM) itself refers to the swampy wetlands that lie adjacent to town.

In terms of wildlife, this resource is viewed as a potential economic resource in SMM because the Kenyan government shares revenue with communities from the occasional culling of zebra herds. In most cases, however, local communities perceive of wildlife as a major problem. For example, many SMM groups indicate that wildlife (e.g., elephants and zebras) is a major threat to agriculture in the area because they consume crops and damage farm fences. Indeed, after drought, wildlife depredation is considered the second most significant cause of food insecurity in SMM.

#### Wealth and Poverty

Group perceptions of wealth and poverty vary significantly by location and by gender and revolve around ownership of livestock (primary) and access to farmland (secondary). Local perceptions of what constitutes a wealthy livestock herd show higher estimates in SMM than in NG (see Figure 1). Interestingly, key informant interviews show a much greater discrepancy in livestock holdings than do the group interviews with male elders and women (see Figure 2). Not surprisingly, SMM livestock averages are noted to be much greater than in Ngambo. This is especially the case for sheep, which are well suited to SSM's highland climate (Longewan, Logorate, and Lomolog sublocations). The difference in numbers, however, is not as great as it is for average household livestock estimates. For smallest household livestock holdings, estimates are considerably higher in SMM. All three categories of livestock ownership—average, wealthy, and poor—show SMM to have more animals than NG, a fact that is confirmed by household-level surveys (McPeak and Little, forthcoming) (see Figures 3 and 4).

In Figure 2, which compares the responses of key informants with those of male elders' and women's groups, the pattern is the same with regard to average livestock holdings. However, while all estimates by key informants are greater than they are for male/women respondent groups in SMM, male/women groups' estimates for both goats and sheep are greater for Ngambo. Cattle estimates, in turn, are only slightly lower than those of key informants. Overall, the estimates of key informants indicate much larger numbers of livestock compared to elders/women informants, and the differences between communities are greater for cattle and goats than for sheep. The pattern suggests that estimates of wealthy livestock numbers for key informants are greater than they are for elders/women informants.

In a sense, shoats (sheep and goats) are more important in SMM than cattle because SMM cattle are herded in distant satellite camps during the dry season, when they contribute little to household subsistence. In addition, many informants said the last drought killed many cattle. This rank order persists even though men and women from SMM say average and rich herders have more cattle compared to Ngambo men and women. Perhaps cattle would have been ranked higher if the surveys were conducted during the rainy season or when such a severe drought had not just occurred. Women

generally indicate smaller estimates of what constitutes a wealthy household herd than do men, with the exception of sheep and chickens (Figure 5).

In terms of poultry, average chicken ownership in NG is much greater than in SMM. These estimates make sense since SMM is a more pastoral economy and less likely to emphasize poultry. The differences seem to have more to do with location, as Baringo women assess fewer cattle and shoats in their herds compared to men, but provide considerably higher estimates for chickens. There is no real pattern for Samburu men versus women. Women may have a better sense of the true number of chickens since this is a commodity they deal with and earn income from their sale and products.

In terms of access to farmland, there are important differences between the two locations, especially since NG clearly is more agricultural than SMM. Estimates of farm sizes are considerably higher among groups in NG than in SMM. It should be noted that the estimated farm sizes of wealthy households is about three times higher than what was recorded in the South Wello (Ethiopia) research, where the largest farm sizes rarely exceed 3 acres (see Amare et al. 2000).

Table 6 lists group perceptions of the most economically-vulnerable types of households. The categories of households are also ranked in importance from left to right, although there are important locational variations. For instance, households without livestock are the most vulnerable for most SMM informants, but this is not necessarily the case in NG, where other sources of income are widely available. Most households, however, do mention female-headed households and households with large numbers of children as being particularly vulnerable. Estimates of female-headed households were about 20 percent in most parts of SMM and NG, but varied anywhere from 5 to 50 percent.

Table 6: Ranking of Household Vulnerability (Percentage of Mention)

Location	Elderly-	Female-	Many	Without	Remote	Without
	headed	headed	Children	Livestock		Farms
Suguta	100%	60%	80%	100%	60%	40%
Ngambo	100%	67%	100%	33%	100%	33%
All	100%	63%	88%	75%	75%	38%

All groups of informants rank households headed by elderly individuals as particularly vulnerable. Indeed one group ranks them as the most economically vulnerable category of household, while three groups identify them as second and three groups list them as the third most susceptible to economic and social problems. Thus, it appears that households headed by the elderly (male or female) clearly are the most vulnerable type.

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As noted above, female-headed households are also considered vulnerable in both SMM and NG. These units often do not have access to sufficient livestock or land to sustain themselves and are structurally disadvantaged when it comes to education and good employment opportunities. Yet these households appear more marginal in Ngambo (NG) since they are ranked as the most vulnerable type of household in two of the three sub-locations. By contrast, female-headed households are ranked second, fourth, and fifth, respectively, by the three groups in SMM that mention this type of household as being vulnerable. This ranking does not correlate with the estimated frequency of female-headed households of different sub-locations, since it varies from 5 to 50 percent in SMM and averages about 25 percent of total households in NG.

Households with large numbers of children are also a particularly vulnerable type of household, although female-headed households are identified as more vulnerable despite being mentioned less frequently than households with many children. In all but one instance, female-headed households were ranked higher on the vulnerability scale than those with many children. The latter category also was ranked below elderly households five out of the seven times it was mentioned.

Those households without livestock were ranked from 1 to 4 (1 being the highest) in terms of vulnerability in SMM, while only one group in Ngambo ranked stockless households as high as 2. Since livestock are a more important source of livelihood in SMM than in NG, this ranking is understandable. However, the trend shows some discrepancies similar to what was revealed for households headed by females and the elderly. Violent clashes in Baragoi, Samburu in the mid-1990s have brought numerous impoverished Samburu to SMM, many of whom have lost most of their livestock.

Remote households are also identified as vulnerable, especially in Ngambo, although usually considered less vulnerable than the previously mentioned categories of households. The 'remote' category was given the number 'one' ranking by only one group in SMM, and was listed no higher than 'three' by other groups and sub-locations. Households without farms are also vulnerable, although much less so, both in frequency of mention and in ranking, than the other types of households mentioned above. This ranking reflects both the importance of animals and the fact that, except for Suguta Mar Mar Town and Lomolog sub-locations in SMM, most Samburu households on Loroghi Plateau have a small farm.

#### **Livelihoods and Coping Strategies**

All groups of men rank livestock above crops for cash generation (see Tables 7 and 8). Although crops can generate significant amounts of cash, unreliable rainfall and lack of water for irrigation make agriculture a high-risk venture. Undoubtedly, men also rank animals higher than crops as a source of livelihood since they often control the income from livestock sales. Males also sell maize and beans, but these crops are not very reliable sources of income in either location, both of which lie in areas frequently visited by drought. Women rarely sell milk in NG because they do not have access to

many animals, which makes their incomes from livestock production much less than that of men.

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Table 7: Women's Cash Income-earning Activities (percentage of mention)

Type of	Brew	Beadwork	Make	Collect	Thatching	Fetch
Respondent	Alcohol		Charcoal	Firewood	Grass	Water
Suguta	90%	50%	70%	80%	20%	30%
Ngambo	100%	100%	33%	17%	50%	0%
All	94%	69%	56%	56%	25%	19%

Table 8 Men's Cash Income-Earning Activities (percentage of mention):

Type of	Migrant Labor	Casual Local	Urban/Town	House
Respondent		Labor	Labor	Construction
Suguta	100%	70%	0%	0%
Ngambo	67%	50%	100%	50%
All	88%	63%	38%	19%

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Alcohol brewing is by far the most frequently mentioned – and highest ranked – activity for women (see Table 7). Only one group of elders in SMM did not mention this activity, perhaps because brewing is illegal and thus a bit difficult for people to discuss so readily. The second most popular income-earning activity for women is beadwork, which is particularly popular in NG. The proximity of NG to tourist facilities at Lakes Baringo and Bogorio expands the market for local handicrafts in the area. Both charcoal and firewood selling are done more by women in SMM, since there are few forests to exploit in NG. Fetching water to sell also is pursued more frequently in SMM than in NG, because large distances to some water points encourages a local cash market for water (Note that is not a very large market and only the wealthiest households can afford to pay for their water). Thatching houses as an income activity is done more in Ngambo, since SMM homesteads do not utilize thatched roofs in home construction.

Women rank brewing and making handicrafts as off-farm income generators more frequently than men do. NG women mention fewer activities for women when compared to NG men. More men than women note that off-farm income does not help people survive periods of severe food shortage because the money earned is too little. Many women say that one of the problems with off-farm income is that debtors do not pay brewers, and most of the latter are women from SMM. The same pattern holds true for charcoal selling.

Migrant labor overwhelmingly is the most commonly mentioned income-earning activity for men, and ranked the highest among SMM informants. This finding is not surprising since Samburu men, including those from SMM, are widely employed as watchmen in Nairobi and other large towns. Local urban/town employment is mainly an option in NG because of its proximity to Marigat town, although in both areas males frequently work in towns outside of the region. House construction involves men in NG, who carry out the framing for the area's more permanent style of house. There seem to be fewer houses being constructed in the less populated SMM, and traditional Samburu houses are constructed solely by women.

Virtually all respondents, except for men and women in SMM town, note that farming as a livelihood strategy has increased since the early 1990s. The most common reasons cited for this growth are: (1) livestock loses from droughts that have forced people to farm; (2) people wish to farm to increase their food security and grow food that they otherwise would have to buy; and (3) the increasing human population requires an alternative to pastoralism to satisfy the greater need for food, as well as more intensive forms of land use. Relatedly, most groups and key informants state that the number of full-time herders in the region has decreased in the past decade, mainly because of drought-related livestock loses. This latter pattern of responses only reinforces the need to increase agricultural production.

From the different interviews it is difficult to estimate what percentage of men and women earn money outside of livestock, especially since crops are mainly for local consumption. However, it appears that on average for the majority the cash earned outside the livestock sector is not very much and merely helps to purchase food (see Little et al. 2001). (Household-level data, however, show that significant amounts of nonfarm income are earned by NG households, see McPeak and Little, forthcoming). As a result, local consumers do not usually have enough money, especially in periods of drought and food shortages, to meet household demands. There is also a particular problem for women who depend on cash from brewing alcohol. Their customers often do not pay them because they know that it is illegal and, therefore, women cannot file official complaints. NG informants complain of this problem more than in SMM, which partially explains why SMM groups rank brewing as the number one activity for women while NG informants do not.

The consensus seems to be that customary drought coping practices are less practiced now than in the past, and have largely been replaced by labor migration and other non-pastoral activities. There are now fewer animals overall to move opportunistically – a key drought-coping strategy in the past. Today there also is less availability of wild fruits and other natural products, an important famine-revention food in the past. Additionally there is more reliance on relief food and purchased foods rather than wild fruits and customary livestock-based foods (e.g., blood, skins, and preserved meat) as means to overcome hunger. Women more often say that wild foods were more available before than now, perhaps because they are the main gatherers of this source of subsistence.

#### **Markets and the Effects of Drought**

Both SMM and NG have relatively good market access, particularly the latter community, which lies about 110 km north of Nakuru city and within 10 km of a tarmac road. SMM, in turn, lies along the northern border of Laikipia District, a commercial ranching district that has favorable access to down country markets, such as Nyrahurua and Nairobi. Although not situated along a tarmac road, SMM has daily transport service between the district capital of Maralal, some 35 kilometers to the north, and the larger towns to the south. It also has the largest livestock market within the district and NG is near an important livestock market (Marigat) as well. In short, both towns are integrated into regional and national market systems and cash expenditures figure heavily in household decision-making.

Key informants and groups of males and females were queried about the effects of the most recent drought (1999-2000) on market conditions, including factor (land, labor, and capital), input (agricultural and livestock), and commodity (grain and livestock) markets, and about current market conditions generally. As expected, there is a cyclical pattern for many of these markets that follows the general 'bust' and 'recovery' pattern of disaster-prone areas. At the time of the interviews (February and March 2002) the communities were in the early stages of recovery from the drought, a period in which livestock losses were in excess of 50 percent in both communities (see McPeak and Little, forthcoming). Figure 7 compares group perceptions of what has happened to key markets from the time of the 1999-2000 drought until March 2002. It examines credit, wage, grain, and livestock markets and finds that gender-based perceptions were similar, with the exception of the labor/wage market. The results in the graph are presented on a scale of 1 to 5, with 1 referring to whether price/costs 'greatly increased,' 2 as 'moderately increased', 3 as 'no price change', 4 as 'moderately declined', and 5 as 'greatly declined'. Data were also gathered on whether changes in the general health of residents had changed between the onset of the recent drought and March 2002.

In addition, information was gathered on land prices, but because the land markets are so different between SMM and NG they are not presented in Figure 7. Generally, SMM informants say access to farmland is free, but NG informants say one must borrow, rent, sharecrop, or buy farmland, especially if it is irrigated. Since 1980 private controls on the use and costs of agricultural land have greatly increased. In 1980 rainfed farmland was generally available for 'free' if the farmer was willing to clear and prepare it. In the past four to five years, however, it has become increasingly difficult to find suitable agricultural land that does not already have claims to it. NG informants uniformly say rental and purchase prices of farmland have increased considerably since the end of the 1999-2000 drought and especially within the past six months. This response is expected since the demand for farmland would be lower during droughts and increase in the recovery period as herders and farmers are able to pursue cultivation to meet food needs and recoup asset (especially herd) loses.

For SMM only Longewan males and females say land rentals and land allocation by the government mainly occurs for outsiders. This community has generally good land for farming and thus there is an interest in cultivation by individuals from within and outside Samburu District. In nearby areas of Samburu District, large tracts of productive land have been leased to a large commercial company for the equivalent of about US \$6.50 per acre per year. This company is growing wheat, a crop that requires large tracts of land to be commercially viable.

Land is bought, sold, and leased in NG, but it is not 'officially sanctioned' and land titles are rarely provided. A person who wishes to lease land for more than a season or purchase land outright should have permission from the local chief or, in some cases, from the Baringo County Council. However, land sales are not recorded officially in a land registry as they are in other parts of Kenya. Both NG and SMM have group ranches, where land is registered on a group basis and members have rights to use land within their ranch area. In some cases, the group committee that oversees land use on the ranch must sanction leased land. In practice, the group ranches have been of minimal utility in NG because, as one group of elders explains, "the ranch areas are too small to maintain our herds." Individuals have largely claimed areas of the NG ranches that are suitable for farming. In both SMM and NG, pasture access is open to members of the respective communities, although certain nearby areas are restricted during the wet season so that dry season grazing may be available for the animals kept near the *manyattas*. The controls on private use of communal pasture areas are more effectively applied in SMM than in NG, where population pressure and other factors make enforcement difficult (see Little 1992).

In SMM there are also strong restrictions on cutting live or young trees without permission of community elders. As noted earlier, NG informants encourage the cutting of Prosopis tree. All water access is free except in NG for those who have taps and in SMM for someone who has dug a well. In both cases permission to use a water source must first be granted, and a fee could be charged. Farmland access in NG is definitely on a "must ask basis." While half of the informants say no change in access to communal resources has occurred in the past decade, some SMM informants say there has been an increased restriction on cutting trees. Widespread deforestation around Maralal town, the nearby district capital of Samburu District, and government and NGO acknowledgement of the problem has heightened awareness in SMM. It is assumed that during a drought the costs of water also rise but we do not have data on this.

Current credit costs for both locations have decreased considerably compared to the recent drought. Since credit from shopkeepers and others is mainly for immediate consumption, it would be expected that demand for credit is high during a drought but drops off in the post-drought period when food is more readily available. However, the effects of food aid – which was widespread in SMM and NG during the recent drought – needs to be assessed since it also can have an important impact on the demand for credit to purchase food. It is unclear at present what this effect has been. Moreover, it is unclear why credit costs would have dropped so significantly in a post-drought period, unless very little credit is used to finance agriculture in NG or livestock purchases/herd rebuilding in NG and SMM, or that its use for these activities pales in comparison to its use for consumption purposes.

It should be noted that there is virtually no formal credit available in either community. Nobody in our sample had received a bank or government loan for agricultural or pastoral activities. What credit is available is informal and usually from local shops for food and sometimes from veterinary shops for livestock medicines. Some funds also are available from informal savings groups, such as women's 'merry-goround' groups. Banks are distant and not willing to loan to pastoralists and agropastoralists who do not have land titles as collateral. Only individuals who have teaching and civil service positions and belong to a work-related credit union can normally obtain formal credit, and even then the amounts are small. This financial option was only mentioned in NG.

We might also expect that during a drought the costs of labor would be low. The reasons are that demand for work on farms would be low and general hardship could push individuals onto the labor market and reduce wages. In this respect, the findings from the community assessments are surprising, as well as show considerable variation by the gender of the respondent. Men estimate wages to be considerably worse in 2002 than in 1999-2000, a pattern that women dispute (see Figure 7). While men are probably more in tune with wages than women and therefore more pessimistic about any changes, it does not seem likely that wages would continue to decline unless the number of impoverished households either from the 1999-2000 drought or insecurity in the north created larger than anticipated levels of immigration into NG and SMM. Based on interviews wage rates seem to have fared better in SMM than in NG, which implies that there has been some increased hiring of SMM herders in the post-drought period.

The biggest issues with labor seem to be that despite local wage declines, respondents still claim it is expensive to hire people. This response is not surprising since household labor is often insufficient. Hiring of labor in SMM is for herding only, while hiring for farming and herding takes place in NG. The major changes in labor relations over the past ten years have been: (1) more hiring of labor for cash compared to the traditional mode of compensation which is animals; (2) more hiring of labor due in part to labor shortages because more children are in school; and (3) more hiring of labor because more people do not have sufficient livestock numbers and thus must farm or work for wages. Less reciprocal labor (unwaged) where groups of neighbors and relatives assist with herding takes place today than in the past. Indeed, most NG informants made little mention of reciprocal herding labor, while some SMM informants say reciprocal labor is still important for herding and watering animals. Of course, there is reciprocal labor in the satellite cattle camps, especially among cattle rich households of SMM, who herd their animals at great distances from the *manyatta* during the dry season. Any reciprocal farm labor in SMM is more like *harambee* (the Kis wahili term for a community fundraiser when money or labor is raised for people or communities "in need), whereas in NG it is women friends and neighbors who help each other on an individual, personal basis.

More men than women say that a current labor-related constraint is the expense of paying for herding and/or farming labor. Both gender groups equally acknowledge a

shortage of labor due to farming, herding animals in distant pastures, and more children in school who would otherwise perform herding duties. They also acknowledge that a change over the past ten years is the increase in hiring labor, in part because increased poverty makes more people seek wages. With regard to reciprocal farming labor, all SMM men say that everybody helps each other *harambee* style, whereas some women say that there is no assistance provided. For NG, women say that only other women help each other in agricultural tasks.

While both the Il Chamus of NG and Samburu of SMM emphasize education's drain on the household labor pool, they nonetheless invest considerably in their children's education as a means to improve the chances of future wage employment. The value of education is high, as evidenced by the fact that many key informants, elders, and women help with school fees of relatives' children. They also express considerable concern that their schools should be improved and expanded. The remittance of income from urban-based workers during droughts was identified as a key drought-coping strategy in NG, and one that is enhanced through increased education.

Market reaction during periods of drought and food shortage is also revealed through high grain prices in the shops and low livestock prices on the market. During droughts, the price of grain, especially the staple maize, increases significantly, while the price of livestock decreases considerably. About half of the informants say it is always this way, while others say that this last food shortage period (1999-2000) was so bad that the price extremes for both grain and livestock were worse than ever before. Figure 7 shows that grain prices have generally come down since the end of the most recent drought and, as would be expected, livestock prices have increased. Interestingly, males who are most involved with the livestock trade, perceive greater increases in prices than do women. Not surprisingly, with the improvement in grain and livestock prices following the drought human health/ability to work has improved. Health conditions were probably at their worst during the most severe months of the drought (see Figure 7).

In terms of agricultural and livestock inputs, most respondents buy veterinary medicines, many buy improved seeds, and many buy and sell livestock to rebuild their herds. Livestock and agricultural extension services seem to be nonexistent, except when there is a vaccination campaign (especially in SMM), which many say they have to pay for now compared to the past when it was free. Longewan elders say that the Ministry of Agriculture provides tractors to plow farmland, but that they have to pay for this service and it is unreliable.

#### Social Relations, Community Organizations, and Development Agencies

All sub-locations report community-based organizations (CBOs) in their areas, and most are women's credit or business groups (including small stock trading enterprises). Membership in CBOs is higher in NG than SMM. Some elders say that, if anything, mutual assistance for some activities has increased in recent years because more people are poor now and must help each other. Households today are also faced with more expenses such as school fees and medical bills. Although poverty is

increasing, the elders say that people are not so poor as to not be able to help each other at all (in South Wello/Oromiya, Ethiopia a different pattern was revealed, see Roth et al. 2002). However, there is an acknowledged decrease in the importance of kin/clan networks as local forms of assistance. Kin- and clan-based networks of assistance in NG seem to be less important than neighborhood- and community-based groups. In Samburu the dominance of the pastoral economy, combined with a relatively low population density, still enable kin and clan relations to be important factors in settlement patterns. The result is that only one or two clans may dominate certain sub-locations, reflecting a clan-based pattern of settlement that is not revealed in NG. An important role for clans in settlement and economic activities generally is not the case in NG, nor has it been for much of the past 40 years (Little 1992).

Part of the explanation for lower levels of CBO activity in SMM than in NG may relate to the more sedentary orientation of the Il Chamus community. With a more stable community and increased agriculture, the scope for NG to develop non-indigenous organizations, such as self-help and women's groups, is greater than in SMM. NG women in particular have relatively favorable access to income-generating activities and consumers and services that facilitate the establishment of business-oriented community organizations. By contrast, SMM women are scattered in dispersed settlements and do not have as much access to towns, nor do they have the concentrated population density needed to generate adequate demand for different types of services and organizations.

All sub-locations report NGOs in their area, although the vast majority of them are to support school children with fees and uniforms and sometimes food or cash assistance to their families. The percentage of NG households that receive assistance from NGOs is much greater than in SMM. All NG informants say households received food assistance from NGOs in the past ten years, and most received some help with drought recovery as well. SMM informants, however, received little assistance from NGOs, especially in post-drought recovery periods. During the recent drought food aid in SMM was mainly distributed through the World Food Programme (WFP) rather than NGOs.

All NG respondents indicated that the government was the main source of food aid during the recent drought, but that some NGOs also provided food assistance. As noted above, in SMM most recent food aid was provided through WFP. All but one sublocation in SMM indicated that recent food aid programs are better than previous ones, because more food is available and distribution is less affected by corruption and politics. Most NG informants say female-headed households are the first to receive food aid, whereas most SMM informants say it was households without livestock. Some SMM informants mention that households where the head is employed outside the community were targeted for food assistance. Such units act as *de facto* female-headed households. Everybody in NG and most in SMM indicated that during the recent drought most children participated in special feeding programs sponsored by NGOs, especially church-sponsored ones.

#### CONCLUDING REMARKS

This preliminary report provides relevant information on community perceptions regarding a range of market, food security, drought, and other related issues. It helps gauge the extent to which these community-level data are comparable to existing data gathered at the household and individual levels, and to what BASIS will gather annually over the next two years. The report also provides a basis for comparison with the Ethiopian study site in the ACL project, and shows the extent to which market and infrastructure development in Kenya greatly exceeds that which is found in Ethiopia's South Wello and Oromiya Zores. Finally, this exercise represents a methodological experiment that shows how quick, group-based interviews can provide important community perspectives on social and economic opportunities and constraints that easily may not be revealed from household and individual observations.

Fig. 1 Estimated Wealthy Livestock Numbers by Location

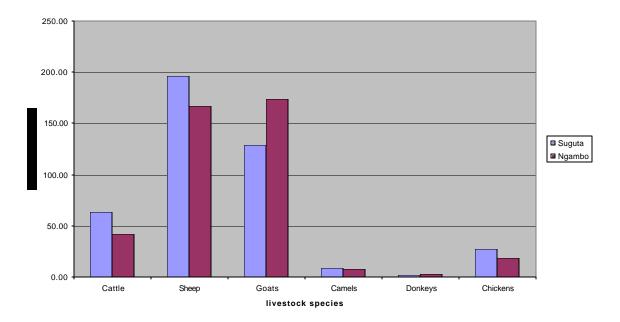


Fig. 2 Key Informant vs Elders/Women Average Livestock Holdings

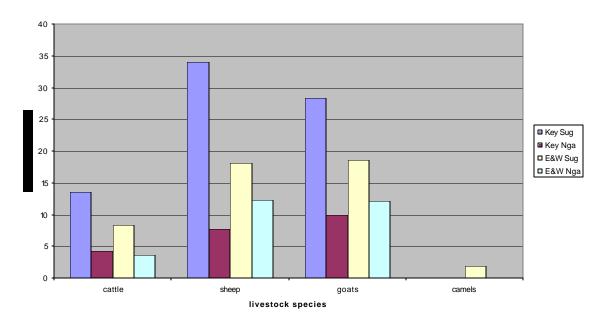


Fig. 3 Average Household Livestock Holdings

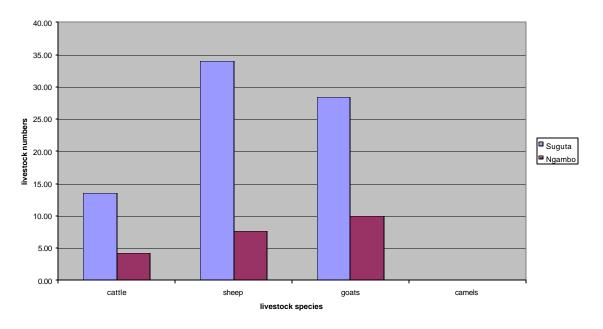


Fig. 4 Smallest Household Livestock Estimates

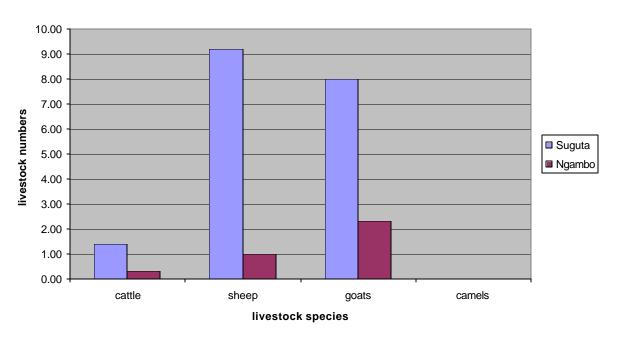


Fig. 5 Estimated Wealthy Livestock Holdings by Gender

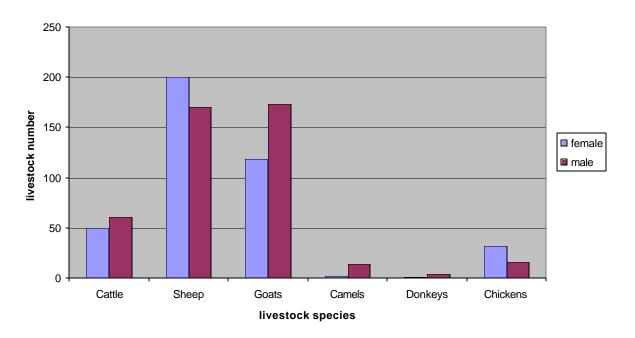


Fig. 6 Average, Largest, Smallest Household Farm Acreage

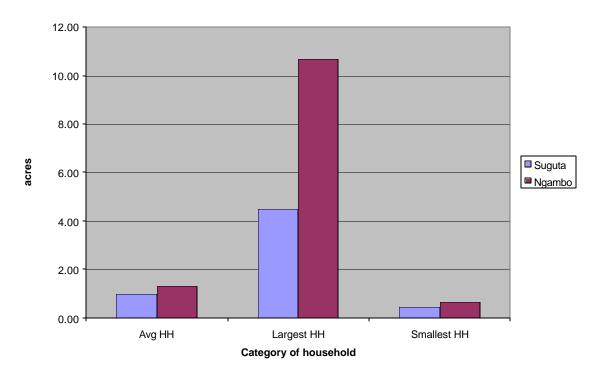
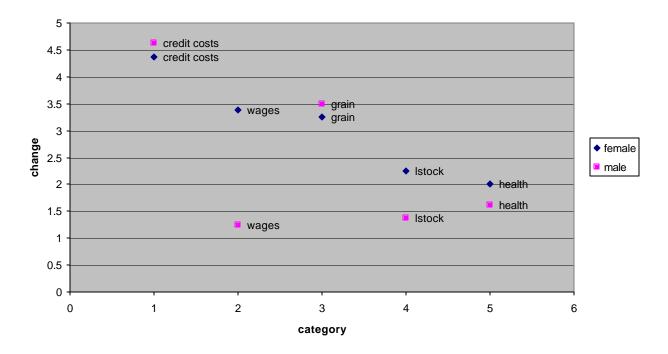


Fig 7. Market Changes: Present vs 2000 Drought



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#### **APPENDIX 1**

## BASIS/ASSETS, CYCLES, AND LIVELIHOODS PROGRAM/KENYA GUIDELINE FOR KEY INFORMANT INTERVIEWS COMMUNITY ASSESSMENTS

(These questions are to be asked of groups of key individuals from the sub-location, such as shop owners, women group leaders, group ranch officials, and other notables. The group should have between 5-8 members. Please explain to the group that the questions are to help us and our partners (including NGOs, government, and others) understand how the sub-location/community perceives of its own problems and the kinds of local solutions and resources they have to address them. All names and identities of individuals will be kept strictly confidential.)

Date:			
Enumerator:			
District:			
Location:			
Sub-location:			
Name of community/	village/se	ttlement	
Longitude	Latitu	de	Altitude
<b>Interview Responde</b>			
Gender, position/occu			
<u>Ge</u>	<u>nder</u>	Position	Ethnic Group
Respondent 1			
Respondent 2			
Respondent 3			
Respondent 4			
Respondent 6			
Respondent 7			
Respondent 8			
		~	
I. Community/Sub-l			1
<ol> <li>Estimated sub-loc</li> <li>Number of house</li> </ol>		uiation	1
			2
3. Percentage of fem	iaie -neade	ed nousenoids	3
4 Dalicious Crouns		antono of the non	avlation.
4. Religious Groups	as a perc	entage of the pop	outation:
1. Muslim			
2. Christian	nimiet		
5. Haumonal/al	st		
5. Ethnic Groups as	a nercent	age of sub-location	on population:

1. Group	%		
2. Group			
3. Group			
3. Group 4. Group			
6. Largest clans in this sub-location		and percentages)?	
1	<u></u> %		
2	%		
3	%		
4			
T			
7. Most important roles that clan importance)? (probe(marria politics, etc.)			ance, local
1			_
2			_
3			_
4			_
8. Distance from all-weather (tarm	nac) road	8km	
9. Distance from seasonal road		9km	
10. Distance from motorized trans		10km	
11.Distance from District headqua	arters	11km	
12. Distance from nearest bank		12km	
13. Number of health clinics in sub	-location	13	
14. Number of retail shops " 15. Number of schools "	"	14	
15.1 (difficult of Schools		15	
16. Number of churches "	"	16	
	"	17	
18. Does this sub-location have a d 1. Daily 2. Weekly 3. None	aily or weekly market?	18	
4. Other			
19. Distance from main daily mark			
residents	-	19	km

20. What are the main means that households use to transport goods in this sub-location?

(Rank choices in order of	<u>i priority</u> )			
1Walking				
2Pack animals				
3Motor vehicles				
4Other				
21. What proportion of local latransporting goods?	nouseholds use	e vehicles for		21
22. What financial institution area? (list in order of im	portance:	_	•	·
1				
2. 3.				
4				
23. What is the average size of in this sub-location?				
24. What is the range in size of 1. Largest		h	ectare	
25. What percentage of house sub-location?	holds are with	nout farm land i		25
26. What is the average current in this sub-location?	nt number of l	ivestock owned	by househo	olds
Average Cattle #				
Average Sheep #				
Average Goats #				
Average Camel #				
27. What is the current range	in size of hous	sehold herds in	this sub-loc	ation?
1. Largest: Cattle	Goats	Sheep	Camels_	
2. Smallest: Cattle	Goats	Sheep	Camels	
28. What percentage of house sub-location?	holds currentl	y are without li		his 28

29. Percentage of households who use purchas such as improved seeds and fertilizers?	ed farm inputs	29
30. Percentage of households who use purchas inputs such as veterinary drugs and tick s		30
31. Percentage of households who use formal of	credit?	31
32. Percentage of households who are advised agricultural or livestock extension?	by	32
<ul><li>33. Do community organizations or association in your area?</li><li>1. Yes</li><li>2. No</li></ul>	ons exist	33
34. If yes, what organizations and what do the 1		
2	_Activity:	
3	_Activity:	
4	_Activity:	
5	_Activity:	
6	_Activity:	
7	_Activity:	
35. Percentage of households who belong to s	such groups?	35
<ul><li>36. Do NGOs exist in your area?</li><li>1. Yes</li><li>2. No</li></ul>		36
37. If yes, what NGOs and what do they do? 1	_Activity:	
2	_Activity:	
3	_Activity:	
4	_Activity:	
5	A ctivity:	

38. Percentage of households who are assisted by NGOs?	38
<ul> <li>39. Have any of these organizations or NGOs assisted households in meeting food problems in the past 10 years?</li> <li>1. Yes</li> <li>2. No</li> <li>3. Do not know</li> </ul>	39
<ul> <li>40. Have any of these community organizations or NGOs assisted households in recovering from droughts in the past 10 years?</li> <li>1. Yes</li> <li>2. No</li> <li>3. Do not know</li> </ul>	40
41. If so, list the community organizations or NGOS and rank then importance in helping to meet food shortages (fs) or drought recov	
1. (fs)	rank
2. (fs)	rank
3. (fs)	rank
4. (dr)	rank
5. (dr)	rank
6. (dr)	rank
42. What government agencies operate in your sub-location?  1Activity:	
2Activity:	
3Activity:	
4Activity:	
5Activity:	
6Activity:	
7Activity:	
43. What are the most important communal resources to the local po	opulation (rank)?
1. Water points, springs	

2 Communal pastures	
3Wetlands/swamps	
4Forests or wooded land	
5Rivers and lakes	
6Clay, iron, or other minerals	
7Wildlife	
8Wild foods from forest, wetlands, etc.	
9Other:	
<ul><li>44. Has there been any private land registration/titling in this sub-location?</li><li>1. Yes</li><li>2. No</li></ul>	44
45. If so, date that it started:	45
<ul><li>46. Are there group ranches in this sub-location?</li><li>1. Yes</li><li>2. No</li></ul>	46
47. If so, date that they started:	47
<ul> <li>II. Sub-location Demographic Change</li> <li>48. Has the population increased, stayed the same or decreased during the past 10 years?</li> <li>1. Increased</li> <li>2. Stayed the same</li> <li>3. Decreased</li> </ul>	48
49. Why has the population changed [or not changed] during the language of the	)

50. Have the number of people moving <u>into</u> the community increased, stayed the same, or decreased during the past 10 years?  1. Increased 2. Stayed the same 3. Decreased	
51. What are the reasons for that pattern of population movement?	
<ul> <li>52. Have the number of people moving <u>out of</u> the community increased, stayed the same, or decreased during the past 10 years?</li> <li>1. Increased</li> <li>2. Stayed the same</li> <li>3. Decreased</li> </ul>	52
53. What are the reasons for that pattern of population movement (out-migra	tion)?
<ul><li>III. Sub-location Food Security</li><li>54. Are than any seasons or times of the year when food shortages are experienced by a large number of families?</li><li>1. Yes</li><li>2. No</li></ul>	54
55. If yes, when do such times of hunger occur?	

1	Cause/s	-
2	Cause/s	-
3	Cause/s	-
4	Cause/s	-
5	Cause/s	-
6	Cause/s	-
raespread no	nger or famine?	
	and amount of outside assistance was received by individual households during of widespread hunger or famine?	ıg t
	od aid and assistance received during the t different than during previous droughts?	
60. If yes, in w	hat ways did it differ?	
1Fe	of families are first to be vulnerable to food shortages? (rank) male-headed households milies without livestock tose without farms	

56. List years or dates during the past 10 years when food shortages or drought was a widespread

<ol> <li>The elderly</li> <li>Families with many chiles</li> <li>Families without milk c</li> <li>Families living in remote</li> <li>Families living near town</li> <li>Other (specify)</li> </ol>	ows areas	_
<ul><li>62. Are organized efforts being done nutritional status of children?</li><li>1. Yes</li><li>2. No</li><li>3. Do not know.</li></ul>	within the community to enhance the	62
63. If yes, who are the sponsors and 1. Agency	what are their activities? _ Activity	
2. Agency	_ Activity	
3. Agency	_ Activity	
<ul><li>64. What are the biggest threats to for</li><li>65. What do you think could be dor location?</li></ul>	ood security in this sub-location?  ne to reduce the prevalence of food shortage	es in the sub-
66. Do you have anything else to te writing on back of page if necessary	ll us about the problems of this sub-location y)	n? ( <u>Continue</u>

#### Appendix 2

#### BASIS/ASSETS, CYCLES, AND LIVELIHOODS PROGRAM/KENYA

#### GUIDELINE FOR FOCUS GROUP INTERVIEWS COMMUNITY ASSESSMENTS

(These questions are to be asked of separate groups of males and females and the individuals should be representative of the community. Each group should have between 5-8 members. Please explain to the groups that the questions are to help us and our partners (including NGOs, government, and others) understand how the sub-location/community perceives of its own pro blems and the kinds of local solutions and resources they have to address them. All names and identities of individuals will be kept strictly confidential.

Date:					
Enumerator:					
District:					
Location:					
Sub-location:					
Name of commun	ity/village/settlem	nent			
Longitude	Latitude _		Altitude_		
(to be filled in lat	er)				
Interview Respon	dents:				
List Names, Ages	of Respondents				
<u>Name</u>				Ethnic Group	
1					_
2					_
3					_
4					_
5					_
6			·····		_
7					_
8					_
I. Livestock and A. 1. What food croplocal livelihood:	<b>Agriculture</b> s are grown in this	s sub-location? F	Rank the to	p three in terms of	importance to
1					
2					
3					

2. What livestock species are kept in this sub-location? Rank the top three in terms of importance to local livelihood:

	1
	2
	3
	What would be the average number of livestock that most households might have now (this udes young calves, goat and sheep kids):
	Cattle
	Sheep
	Goats
	Camels
	Donkeys
	Chicken
l.	What would be the number of livestock that a rich household might own now:
	Cattle
	Sheep
	Goats
	Camels
	Donkeys
	Chicken
5. <i>1</i>	Are there crops exclusively grown by women?  1. Yes 2. No
5. If	Eyes, please list:
'. D	To people from this sub-location practice irrigation and, if so, what are its benefits?

ank in order of importance.	or cash income? Please
•	
1	
2	
3	
4	
5	
D. Do you barter commodities or goods (i.e., exchanges without money)? 9	
1. yes	
2. no	
2. 110	
If so, what is bartered (cattle, grain, milk, etc,)?	
11 50, what is bartered (cattle, grain, innix, etc.).	
(9a) Is there a time of year when bartering is especially important? 9a_	
1. yes	
2. no	
(9b) Does bartering take place with people from other communities?	9b.
1.yes	<u> </u>
2.no	
If so, when and with whom:	
(9c) Are there any commodities that women especially barter?	9c
1.yes	
2.no	
If so, what are they?	
0. Have the number of people farming in the community increased, stayed	the same, or decreased
uring the past 10 years? Why?	
·	
1. Have the number of people keeping livestock in the community increase	ed, stayed the same, or
ecreased during the past 10 years? Why?	

II. Land 12. How do people get access to cropland in this community (rank in order of importance)? 1. Inheritance 2. \_\_\_\_Sale 3. Allocation from chief/government 4. \_\_\_\_Rental 5. \_\_\_\_Sharecropping 6. Borrowing from family member 7. \_\_\_\_From Community/traditional user rights 8. Other 13. How do people get access to pasture land in this community (rank in order of importance)? 1. Inheritance 2. \_\_\_\_Sale 3. \_\_\_\_\_From Community/traditional user rights 4. \_\_\_\_\_Rental5. \_\_\_\_\_Allocation from chief/government 6. \_\_\_\_\_Borrowing or using rights from family member 7. \_\_\_\_Communal lands 8. Other 14. What kinds of land transactions (sales, rentals, leases, etc.) take place in this area? Type of transaction Who sells/rents land Who gets land Prices/Rates (sales, rent, etc) 15. How have land transactions changed during the last ten years? Probe: For example, are land sales and sub-division increasing, decreasing, or staying the same as in the past? Are there changes in the types of transactions? Prices? 16. What are the major constraints concerning land that people face? (Rank in order of importance) 1. \_\_\_\_ Lack of adequate grazing 2. \_\_\_\_Lack of adequate land for farming 3. Land prices are too high 4. \_\_\_\_Environmental degradation on the land 5. Bush encroachment has increased 6. \_\_\_\_Quality of pasture has declined 7. \_\_\_\_Other (specify)\_\_\_\_\_

111. Wa 17. Wha	at are the major constraints concerning water faced by local people (Rank in order of
importa	
	Lack of potable waterLack of water for irrigation
	Lack of water for irrigation Lack of access to water for livestock
	Conflicts over access to water for irrigation
	Conflicts over use of water among herders
6.	Watering points or streams are drying up
	Water supply is too distant
8	Other
18. Wha	mmunal Resources at communal resources (pastures, trees, water, etc.) do community members use?
	v is access to, and use of, each communal resource determined?
	Resource Mode of Access/Usage
1.	Pasture
2.	Trees
3.	Water
4.	Farm land
5.	Other (specify)
	w has access to these resources changed in the past ten years (probe—has there been ed restrictions, have sales of communal resources affected access, etc.)?
X7 T =1:	
V. Lab	OF Control of the Con
21. Wha	at problems, if any, exist in this sub-location regarding labor for livestock and agricultural es?

22. Does any hiring of labor for herding and agriculture takes place? Who hires? Who seeks employment?
23. How have the ways of obtaining labor for herding and farming changed in the past 10 years?
24. What proportion of households engage in reciprocal labor arrangements for herding purposes with other households?
25. What proportion of households engage in reciprocal labor arrangements for farming purposes with other households?
VI. Inputs 26. Do people use inputs such as veterinary medicines, dips, improved seeds, fertilizers, and herbicides?  Probe: If not, why not?  If yes, what are the constraints?
27. How and where do households in this community obtain livestock and farm inputs such as veterinary medicines and fertilizer?  1. Veterinary medicines  2. Other livestock inputs (specify)  3. Fertilizer  4. Other farm inputs (specify)
28. What government extension programs are operating in this sub-location? What has been the impact?

VII. Credit
29. Currently what are the different sources of credit for livestock and farming activities?

30. What are the major constraints on obtaining credit from each of those sources?
31. What is credit specifically used for?
VIII. Non-Agricultural and Off-farm Income Earning 32. What are the types of non-agricultural/off-farming earnings for households in community?  Probe: Migrant labor? Urban work? Handicrafts? Food-for-work? Brewing, etc?
33. What types of non-agricultural/non-pastoral/off-farming earnings activities are important to women in this community? Rank in order of importance
34. What types of non-agricultural/non-pastoral/off-farming earnings activities are important to men in this community? Rank in order of importance
35. How do non-agricultural/non-pastoral/off-farm income activities help families during periods of severe food shortage?
36. What problems exist obtaining non-agricultural, non-pastoral income?

<b>IX. Marketing</b> 37. How frequently do livestock traders visit this sub-location (weekly, monthly, etc.)?
38. What livestock and agricultural commodities do you get from other areas? Specify name and location of areas.
39. What are the major transport constraints faced by local households in marketing their livestock and grains?
X. Food Security 40. When was the most recent severe food shortage?
41. What coping practices were helpful in surviving that and other periods of severe food shortage or famine (rank in order of importance)?  Probe: Practices such as livestock sales, off-farm employment, or reduction of consumption.
42. How have these coping practices changed in your lifetime?
43. What have been the major impacts of severe food shortages on the community and its members?

44. During the most recent food shortage, how did the market react?  Probe: Changes in supply and price of food, livestock prices, etc.?
45. How did this market reaction compare to previous times of food shortage in your lifetime?
XI. Factor Market Characteristics
During Past 6 months:
For each of the following questions indicate as: 1=increased strongly, 2=increased slightly, 3=no change, 4=decreased slightly, 5=decreased
46. Land prices and rental rates:
47. Borrowing (credit) costs and rates:
48. Wage rates in the area:
49. Grain prices:
50. Livestock prices:
51. Capacity to work/health:
During the most recent drought (2000):
For each of the following questions indicate as: 1=increased strongly, 2=increased slightly, 3=no change, 4=decreased slightly, 5=decreased
52. Land prices and rental rates:
53. Borrowing (credit) costs and rates:
54. Wage rates in the area:
55. Grain prices:

56. Livestock prices:
57. Capacity to work/health:
XII. Community Relations 58. What sorts of economic assistance and exchanges often occur between people who are related by kinship and clan? Between neighbors? Between community members?
59. How have kinship or community relations helped individual households survive recent periods of severe food shortage and drought?
60. How are current kin- and community assistance exchanges different that in the past? If different, how and why?
XIII. Community-Based Associations, NGOs, and Government Services  61. What types of community-based organizations (CBOs) operate in the community? (probe—women's groups, informal credit groups, livestock dip committees, funeral associations, etc.)
62. Is membership in such CBOs accessible to any community member who wants to join? If not why not?
63. How were the activities, the participation and other facets of CBOs affected by recent periods of severe food shortages?

64. What role, if any, do these CBOs play in helping households survive periods of severe food shortage?
65. What role, if any, do these CBOs play in helping households recover from periods of severe food shortage and livestock loss?
66. What kind of changes – for example, activities and participation are CBOs experiencing?
67. What NGOs operate in the community?
68. What role, if any, do these NGOs play in helping households survive or recover from periods of severe food shortage and drought?
69. How have government agencies assisted the community during the last period of severe food shortage and drought recovery?

70. Do you have anything else to tell us about your community and its needs? (Continue writing on back of page if necessary)		
	70. Do you have anything else to tell us about your community and its needs? ( <u>Continue writing on back of page if necessary</u> )	